DNREC's SITE INVESTIGATION & RESTORATION BRANCH:

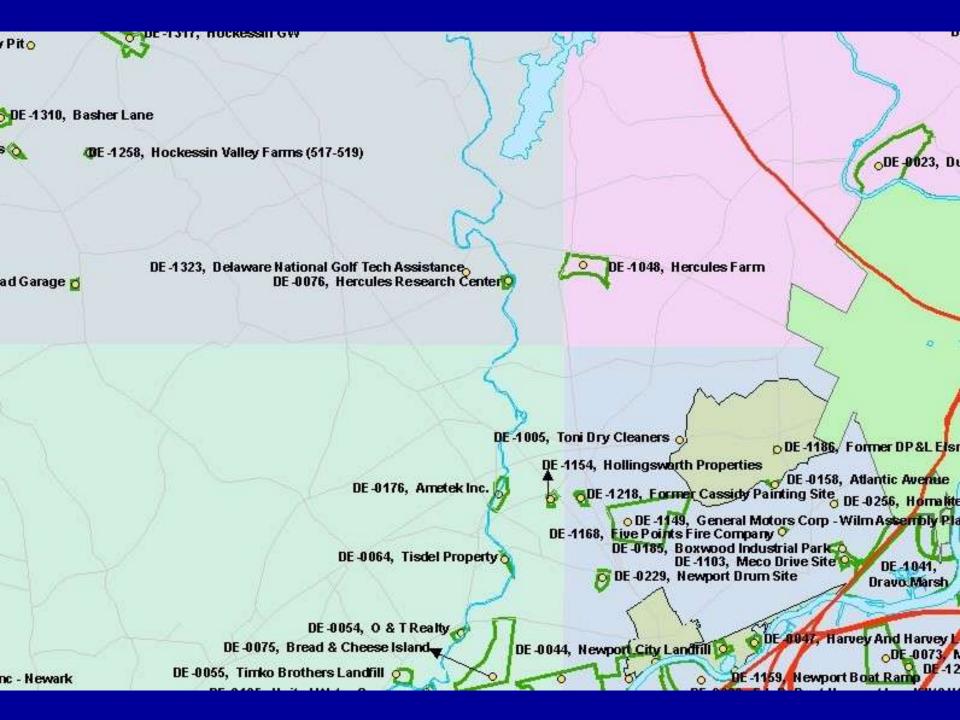
Technical Assistance to New Castle
County and Cleanup Oversight Role on the
Hercules/Delaware National Site



Stephen Johnson, P.E.

DNREC Project Manager

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HSCA Cleanup Regulations and Guidance

- Delaware Regulations Governing Hazardous Substance Cleanup.
- Remediation Standards Guidance Under the HSCA.
- Standard Operating Procedures for Chemical Analytical Programs Under HSCA.
- Operation and Maintenance Guidance Document for HSCA and VCP Sites.

Site Investigation -> Site Restoration

- Decide whether a site should be cleaned up
 - Technical
 - Legal/Regulatory
- Determine when there is enough information to pick a cleanup method
- Propose a cleanup plan
 - Provide information
 - Seek public input
 - HSCA Regs Sec 8.7

- Evaluate detailed cleanup plan ("Remedial Action Work Plan")
 - Health & Safety Plan
 - Approve methods & materials to be used on the job
 - Approve confirmation sampling plan
- Determine whether the remedial action meets the objectives of the Final Plan

Decide whether a site should be cleaned up

Technical

Does risk at the site warrant cleanup?...

– YES

Legal/Regulatory

Does DNREC have jurisdiction under the Hazardous Substance Cleanup Act

 NO, but MOA with New Castle County.

Hazardous Substance Cleanup Act (HSCA) 7 Del. Code, Chapter 91.

§ 9103. Definitions.

(20) "Release" means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing into the environment (including the abandonment or discarding of barrels, containers and other closed receptacles containing any hazardous substance or pollutant or contaminant), but excludes:

c. The appropriate application of fertilizer and pesticide;

Enough information to pick a cleanup method?

- Make the most use of historical information about the site
- Use that to develop the Site Conceptual Model—the "theory"
- Take samples that to confirm the theory
- Just as important—take samples to DISPROVE the theory

Propose a cleanup plan

 Cleanup goals and plans are judged on long and short term effectiveness, protectiveness, feasibility, compliance with other laws, restoration time frame, and reduction in volume and toxicity

- Public participation and acceptance
 - Proposed plan>public comments>final plan

Site Investigation-->Site Restoration

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 - ✓ Legal/Regulatory
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 - ✓ Public information
 - Seek public input

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Health & Safety Plan

- Must meet the OSHA requirements for hazardous material operations
- For site workers and also the public
- Goal is to keep all contamination on the site and under control and to protect workers
- Air monitoring/Dust control
- Regular safety briefings and emergency procedures
- Health and Safety Officer

Approve Methods and Materials

Remedial Action Work Plan:

- Set up an administrative structure
- Progress reports, weekly construction meetings
- Every aspect of materials management how excavated material is staged, loaded, when and where transported

Confirmation Sampling

- Sampling in excavations
- Sampling in treatment areas
- Soil samples analyzed in an independent laboratory
- Sampling and analysis methods consistent with EPA and industry standards

Final Determination

Did the remediation project meet the goals stated in the Final Plan?